

Product datasheet for **RG203584**

GMPR2 (NM_016576) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GMPR2 (NM_016576) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GMPR2
Synonyms:	GMPR 2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG203584 representing NM_016576 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACTTCCTGCCTTCCAGCCCTCAGATTCATCGCTACCCCGAGGCTAAGCGCCATGCCTCATATTGACA
ACGATGTGAAACTGGACTTCAAGGATGTCCTTTTGAGGCCAAACGCAGTACCCTTAAGTCTCGAAGTGA
GGTGGATCTCACAAGATCCTTTTCATTTGGAAGTCAAAGCAGACATACTCTGGGGTTCCCATCATTGCT
GCCAATATGGATACTGTGGGCACCTTTGAGATGGCCAAGTTCTCTGTAAGTTCTCTCTTCACTGCTG
TCCATAAGCACTATAGCCTCGTTCAGTGGCAAGAGTTTGTGGCCAGAATCCTGACTGTCTTGAGCATCT
GGCTGCCAGCTCAGGCACAGGCTCTTCTGACTTTGAGCAGCTGGAACAGATCCTGGAAGCTATCCCCAG
GTGAAGTATATATGCCTGGATGTGGCAAATGGCTACTCTGAACACTTTGTTGAATTTGTAAGATGTAC
GGAAGCGCTTCCCCCAGCACACCATCATGGCAGGGAATGTGGTAACAGGAGAGATGGTAGAAGAGCTCAT
CCTTTCTGGGGTGCATCATCAAAGTGGGAATTTGGCCAGGCTCTGTGTACTACTCGGAAGAAAAC
GGAGTGGGGTATCCACAGCTCAGCGCAGTGTGGAGTGTGCAGATGCTGCTCATGGCCTCAAAGGCCACA
TCATTTTCAGATGGAGTTGCAGCTGTCTGGGGATGTGGCCAAGGCTTTTGGGGCAGGAGCTGACTTCGT
GATGCTGGGTGGCATGCTGGCTGGGCACAGTGTGAGTGGTGGTGTGAGCTCATCGAGAGGGATGGCAAGAAG
TACAAGCTTTCTATGGAATGAGTCTGAAATGGCCATGAAGAAGTATGCTGGGGCGTGGCTGAGTACA
GAGCCTCAGAGGAAAGACAGTGGAAAGTTCCTTTTAAAGGAGATGTGGAACATACCATCCGAGACATCCT
AGGAGGGATCCGCTCTACGTGTACCTATGTGGGAGCAGCTAAGCTCAAAGAGTTGAGCAGGAGAAGTACC
TTCATCCGAGTACCCAGCAGGTGAATCCAATCTTCACTGAGGCGTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG203584 representing NM_016576
 Red=Cloning site Green=Tags(s)

MTSCLPALRFIATPRLSAMPHIDNDVKLDFKDVLLRPKRSTLKSRSSEVDLTRSFSFRNSKQTYSGVPIIA
 ANMDTVGTFEMAKVLCFKSLFTA VHKHYSLVQWQEFAGQNPDCLEHLAASSGTGSSDFEQLEQILEAIPQ
 VKYICLDVANGYSEHFVEFVKDVRKRFPOHTIMAGNVVTGEMVEELILSGADI I KVGIGPGSVCTTRKKT
 GVGYPQLSAVMCADA AHGLKGHIISDGGCSCP GDVAKAFGAGAD FVMLGGMLAGHSESGGELIERDGKK
 YKLFYGMSSSEMAMKKYAGGVAEYRASEGKTVEV PFKGDVEHTIRDILGGIRSTCTYVGA AKLKELSRRTT
 FIRVTQQVNP I FSEAC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016576

ORF Size: 1098 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_016576.5](#)

RefSeq Size: 1872 bp

RefSeq ORF: 1101 bp

Locus ID: 51292

UniProt ID: [Q9P2T1](#)

Cytogenetics: 14q12

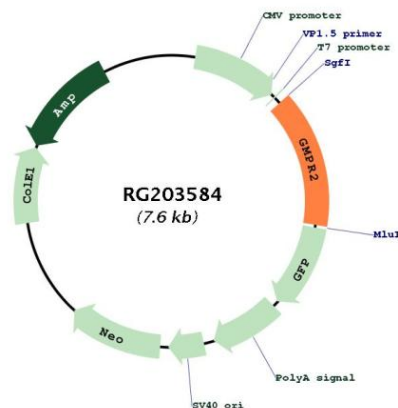
Domains: IMPDH

Protein Families: Druggable Genome

Protein Pathways: Purine metabolism

Gene Summary: This gene encodes an enzyme that catalyzes the irreversible and NADPH-dependent reductive deamination of guanosine monophosphate (GMP) to inosine monophosphate (IMP). The protein also functions in the re-utilization of free intracellular bases and purine nucleosides. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2017]

Product images:



Circular map for RG203584